



Assessing fistula and obstetrical surgical capacity in South Kivu, DRC

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ABSTRACT

The Democratic Republic of Congo has suffered from decades of conflict and poverty. The Eastern DRC, in particular, continues to be a region dominated by instability, resulting in a fragmented health system. Governments and agencies interested in working towards improving health in the region are often challenged by an absence of knowledge of health metrics, limited capacity for health care delivery and overwhelming needs. The Harvard Humanitarian Initiative and Engender Health needs assessment, outlined in this report, demonstrates an effort to better understand the current state of surgical capacity in the region with an emphasis on needs and opportunities related to fistula repair.

Keywords: obstetric fistula, assessment, surgical,

INTRODUCTION

Background

Decades of civil unrest, armed conflict and weak or absent governance have resulted in unique public health consequences and inconsistent access to health services for the population of the Eastern DRC^{1,2}. The combination of poor nutrition, severe sexual violence and restricted access to obstetrical care have resulted in a high number of complicated gynecologic and obstetric problems such as fistula and uterine prolapse^{3,4}. The exact prevalence of these medical problems is unknown and will likely remain so given the difficulty of population research in the area. Much has been done to address these problems, in particular by Panzi Hospital in Bukavu, but continued violence, and inadequate access to health care results in continued new cases⁵⁻⁶. There is widespread belief among the public health and health care community that many patients remain untreated.

Current Structure of Health System

In Eastern DRC the Ministry of Health (MoH) maintains nominal authority over all aspects of health care delivery, but given governance restraints and limited resources, a great deal of control has been delegated to other bodies, such as the World Health Organization (WHO), and various non-governmental organizations (NGO's) and religious organizations⁷.

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Little government oversight and parallel funding and supply streams leads to highly variable standards of care and availability of services⁸. In addition, clear guidelines by the MoH surrounding such issues as fee for service, are at odds with controlling organizations 'mandates and affect access to care⁹. A national plan for GBV is currently being implemented and MoH officials are attempting to guide policy and practice in accordance with national policies and supporting actors¹⁰.

South Kivu is divided into Health Zones based on population and geography. Rural health zones are intended to have between 100-200,000 inhabitants but population estimates are difficult in the region. Each health zone has a health management staff member, a referral hospital and a number of health centers. Referral hospitals are intended to have the capacity to meet most surgical needs of the catchment area. Significantly, regional health centers do not have to capacity to provide cesarean sections and only some referral hospitals have capacity for fistula repair. Two hospitals in the region: Panzi Hospital in Bukavu, South Kivu and HEAL Africa Hospital in Goma, North Kivu are known fistula specialty hospitals¹¹⁻¹².

METHODS

Team and Logistics

During August and September 2010, a team of three public health trained physicians conducted an assessment of current fistula-related surgical capacity in South Kivu. The assessment had three components: key informant interviews, review of fistula-related clinical and public health-related programs and clinical site visits. The project was based out of Panzi Hospital, the center of fistula surgery for the province and the base of fistula-related surgical training and outreach projects.

Key Informant Interviews

A selection of informants was chosen based on involvement in and understanding of the complex health care system and its relationship to the occurrence of fistula. While not comprehensive, every attempt was made to engage a variety of stakeholders, including those with direct involvement

with current fistula programs, those at the program management level, women's and civil service organizations, government officials and clinicians. All key informants were asked for recommendations on additional contacts and an attempt was made to include them in the assessment. Direct interview of patients was not conducted due to the sensitive nature of conducting interviews in a clinical setting. Logistical barriers made interviews with community leadership in rural areas difficult to arrange, so those working with community groups such as Malteser International and hospital clinical and social staff were used as proxy. Community leadership in the urban area of Bukavu was represented by the coordinator for Women for Women International, a well-respected NGO working extensively in the area.

Interviews with clinical and program staff were conducted in a semi-structured manner, with additional questions based on the person's experience, involvement in, and knowledge of the subject. Interviews with support staff at Panzi Hospital and at other sites were conducted in a tailored manner emphasizing their areas of expertise or experience. All interviews prioritized known or perceived barriers to obstetrical service and fistula repair and areas of opportunity for improving services in the region.

Review of fistula-related public health, clinical and support programs

A total of eight programs (PMU-VVS, Fistula Foundation, Engender Health ,IMC, USAID-CRS, UNFPA, HEAL Africa and one local institution, Nyatende Hospital in Kalagane, South Kivu) that provide some level of fistula services were evaluated by the research team. Informational interviews with program staff and review of program documents and activities offered insight into past and current activities in the region. These programs included hospital-based surgical support programs, outreach and patient transportation programs, awareness raising and advocacy programs, psychological counseling, general support and vocational training. Because of an absence of reliable regional statistics, these programs were explored qualitatively, emphasizing what programs or aspects of programs resulted in meaningful impact of patient care.

Site visits

A total of seven hospitals (Panzi, Kaziba, Nyatende General Reference Hospital of Kalagane, General Hospital of Uvira, Walungu, Kakawende, and Kaniola) were chosen by the team based on presumed relevance to fistula services and security and logistical constraints. Contact with the sites was made in advance, permission to visit the sites was granted by the MoH, and as well as health zone directors and managing agencies when possible. Relevance to fistula services was determined by consensus based on the following criteria: perceived need for increased program and surgical support, potential for surgical capacity, representative geographical consideration and stakeholder management and proximity to underserved or conflict prone area. It was expressed during key informant interviews and with the MoH that these hospitals were representative of the referral hospitals in the province. A brief site visit and programmatic overview was also conducted at HEAL Africa Hospital in Goma for comparison. At each site qualitative interviews were conducted using the assistance of two trained local translators with over twenty years experience in the region. In addition to the hospitals, several health centers were also visited using a similar assessment method.

At each site a structured interview was conducted with the responsible clinical officer with and without additional staff present. The interviews with clinical officers and other clinical staff documented their perceptions and understanding of barrier's to obstetric and fistula care. The focus of each clinical assessment was to address deficiencies and opportunities for improvement of care at that particular clinical site.

Following the interview, a tour of the clinical facilities was conducted during which time equipment and supplies were evaluated and further capacity questions were asked. This assessment established current and typical levels of supply stocking, surgical equipment, patient flow patterns and volume (via log books,) staffing and facilities.

RESULTS

The needs assessment allowed the research team to achieve a thorough understanding of fistula related services in this complex and fragmented health system. While individual key informant interviews and site visits often portrayed the constraints of a single faulty system, such as staff funding or supply chain problems, the mosaic of the combined assessment, supported by the literature, revealed great opportunities for improving care at the population level, as outlined below.

Improving basic obstetric services

Almost universally, key informants cited improved basic obstetric services as the best way to decrease the need for complex obstetric care and improved overall population health¹³. Sites with capacity for providing uncomplicated obstetric surgeries lacked support, with operational capacities often limited by shortages in relatively inexpensive items, such as sutures and food for pre- and postpartum mothers and gasoline for generators to run operating room equipment⁸. Others also cited lack of appropriate technical training for nursing staff and lack of awareness of safe delivery programs as key limitations. Awareness of and access to health worker-assisted deliveries and adequate training and resources for identification and referral of potentially complicated deliveries represent substantial opportunities for marked improvement in outcomes.

Decentralization of Fistula Repair

Throughout the province, multiple sites demonstrated potential for a comprehensive fistula repair program. Several hospitals had trained staff, equipment and had identified patients in need of surgery, but lacked adequate funding and supplies to support the delivery of obstetric fistula care.

Packaged Fee for Service Programs

External obstetric fistula repair programs working on a fee for service basis function as successful models in this regional assessment. These programs supply the institution with a set fee per patient for comprehensive fistula repair including staff stipend, supplies, patient housing, psychosocial, vocational and community reintegration support, in addition to providing further care for surgical complications.

Other programs, such as mobile clinics and less comprehensive institutional programs demonstrated lesser degrees of clinical efficacy and cost effectiveness.

Continued Technical Training

The resource of Panzi Hospital as a regional referral and training center is of paramount importance to overall system function. The hub and spoke implementation structure, with Panzi at the hub, is perceived by key informants and clinicians as a key to regional success.

System Constraints

It is a sad irony that a health care delivery system hampered by dire resource constraints, chronic violence, and unsolvable logistical constraints is further undermined by lack of coordination and disharmony of those providing care. NGO's, religious institutions, government and non-profit hospitals all compete for funding and run largely parallel health systems, leading to marked inequity and inefficiency.

Local Success Paradigm

Nyatende Hospital, the referral hospital for Kalagane Health Center located some 4 kilometers from Panzi Referral Hospital, is a functioning model for successful reduction of maternal mortality, obstructed labor and obstetric fistula, in the region. The senior surgeon and medical director, Dr. Vincent Cibavunya, arrived at Nyatende 10 years ago, at which time almost all deliveries occurred at home, with high infant and maternal mortality, obstructed labor and obstetric fistula.

Through a needs assessment it was determined that the major factors involved in home birth practice included cultural bias against hospital birth, ignorance of the benefits of obstetric care, and financial barriers (National fee for service averages 7 USD for vaginal birth and 15 USD for Cesarean Section).

The hospital implemented outreach programs using doctors, nurses, local churches and pastors, to explain the benefits of obstetric care and hospital birth. Further institution of a health care credit union

has allowed a reduction in all maternity care fees. Currently, 85% of births in the Nyatende catchment area occur in the Kalagane regional health center or Nyatende Hospital; infant and maternal mortality is much reduced- close to zero, and obstetric fistulas are rare.

Project Limitations

Two identified sites (the General Reference Hospitals of Kaziba and Walungu) were not visited due to perceived redundancy in facility type and logistical reasons. The Kaziba site was featured in a video produced by UNFPA which gave an overview of the physical plant and surgical capacity of the site. In addition, the medical directors for each of these sites were interviewed in the style of a site visit interview and included in the assessment. Logistical constraints and security concerns further limited the depth of clinical evaluation of each site visited and eliminated several sites from consideration altogether.

CONCLUSION

Despite the regions long history of conflict and some of the world's worst health outcomes, opportunities to improve care in South Kivu are readily apparent. Using an assessment model of key interviews, program evaluation and site visits, the research team gained an understanding of a complex and fragmented health system and identified opportunities for improving care. One of the greatest unmet needs, as indicated by numerous key informants and active clinicians, is the lack of reliable and routine access to emergency obstetric care and standard antepartum, intra- and postpartum obstetric services. Improving obstetric care seems the greatest opportunity to improve women's health in the Eastern Region of DR Congo. In addition to reducing neonatal and maternal mortality it presents the possibility of preventing obstetric fistula and its complex psychological, social and surgical complications. Obstetric fistula repair services via continued support of Panzi Hospital as a center of excellence while carefully implementing high-quality decentralization of treatment using a fee for service model may improve access to successful obstetric fistula care throughout the region.

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